

Let's look more closely to see how competition among local suppliers of loops would discipline a carrier that behaved as if it controlled a bottleneck and could exercise market power by charging an interexchange carrier more for access service.<sup>12</sup> First, economics predicts that the interexchange carrier paying higher access rates would raise the long distance rates it charges end users of that local carrier. To do so, the interexchange carrier would have to charge customers higher or lower prices for long distance services depending on whether the customer's local carrier set higher or lower rates for access service. This is a departure from current practice, but it would be the rational, profit-maximizing response of IXC's to a new environment in which customers have a choice of local carriers and local carriers do not all charge IXC's similar rates for access service. In this environment, IXC's would want long distance rates to reflect higher access prices where they have to be paid, both to avoid losses on calls on which access rates were higher and to avoid being undercut on other calls with lower access rates by IXC's who did not price on averaged access costs. Furthermore, IXC's would want to give customers an incentive to choose local carriers with lower access rates. Interexchange carriers would be hurt by higher access charges, even if they could pass them on, because higher prices would reduce demand for their service.

The IXC's could use a variety of methods to make sure customers got the message that they will suffer if their local carrier charges more for access. IXC's could underline the message in their billing by establishing uniform long distance rates, exclusive of access, and then itemizing on the bill a separate rate element that recovered access charges and varied depending on the local carrier chosen. IXC's could spread the message with marketing, using general advertising, targeted bill inserts, and personal calls on important customers by marketing personnel.

In these ways end users would see that their cost of using a local carrier has two components: what they pay the local carrier directly for local service, and what they pay the local carrier indirectly when they pay long distance carriers enough to cover the cost of access. If consumers have choices among competing suppliers of local loops, they

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<sup>12</sup> We assume here that end users do have a choice of suppliers of local loops in order to evaluate the GR claim that such competition will not eliminate a multi-bottleneck.

should make their choice not on the basis of one component of cost, but on the overall cost, including the effects of access services on long distance service. A local carrier that sets high access rates imposes costs on its loop customers, and will lose business to competing local carriers.<sup>13</sup>

This is the basic argument, but the analysis can be extended to deal with related questions. Could local carriers exercise market power over access services because customers would not learn the indirect costs of carriers' charges to IXCs until after they had chosen their local carrier? In the first place, both competing local carriers and interexchange carriers would have an incentive to provide the necessary information in advance. Even if customers did not get sufficient information to make good first choices, however, local carriers would have little opportunity to exercise market power so long as end users could switch carriers after they learned the true cost of their choice.

What if customers could not easily change their choice of carrier because they had to make a long-term commitment before receiving service from a local carrier?<sup>14</sup> First, if customers must make long-term commitments to purchase, they will in turn want long-term, up-front commitments from the carrier about the cost of signing on. Most people would not sign a five-year lease on an apartment without getting commitments in the lease limiting the landlord's ability to raise the rent during those five years. Second, it would be difficult for a local carrier to raise the costs of customers already signed up without making their service look more costly to customers who are still considering whether or not to sign up.<sup>15</sup> Carriers will have to compete to sign up new customers, and this competition will constrain their ability to raise prices to customers

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<sup>13</sup> Some modification in the analysis is needed in the case of terminating access service since, under current billing arrangements, the calling party pays for long distance calls, not the called party whose local carrier supplies terminating access. The called party, however, would not be indifferent to the effects of higher terminating access charges since the called party generally benefits from calls received. Higher prices for terminating access and received long distance calls would reduce the number and length of calls received and reduce those benefits. In any event, terminating access at most raises a specific problem susceptible, if necessary, of specific solution, not the generalized problem of "multi-bottleneck" described by GR.

<sup>14</sup> This case is analyzed not because it is the most likely one, but to show that there still are market mechanisms to limit the exercise of market power.

<sup>15</sup> Even if the higher rates applied only to old customers, the increase would make prospective customers think it more likely that their rates also would be increased after they signed up.

already signed up, even if customers who have signed a long term contract cannot easily change carriers. Competition for new customers will be especially important in the early years, when new carriers are trying to build viable businesses.

The GR concept of a "multi-bottleneck" hinders rather than helps understanding of the competitive consequences of new local carriers supplying service. The extent to which identifiable groups of customers can turn to alternative suppliers for specific local services is important for determining what local services are subject to what extent of competition and for setting policy. Which services are subject to increased competition will, for example, depend on the extent to which new local carriers supply loops or only intermediate services such as dedicated transport. The economic analysis necessary to address these issues, however, is fundamentally different from the "multi-bottleneck" notion put forward by GR. They claim local carriers will control a bottleneck, and be able to exercise market power in selling access services, regardless of the competition in selling local services to end users. Such an assertion denies rather than evaluates the consequences of entry and local competition.

### **III. Vertical Integration of Local and Interexchange Carriers is Neither Inevitable Nor Necessarily Harmful**

GR claim that local carriers necessarily will vertically integrate with interexchange carriers and information service providers to become "full service providers." The consequence, claim GR, will be exclusion and foreclosure of stand-alone interexchange or information service rivals. Economic analysis has devoted considerable attention to vertical relationships over the past decade or so, and that analysis provides little support for the GR position. This section describes what is missing from GR's picture of the nature and effects of vertical integration. The next section discusses their claim that vertical integration will lead to exclusion and foreclosure.

GR present a very distorted perspective on the role and effects of vertical integration by focusing only on foreclosure. Their discussion ignores three important lessons taught both by economic analysis and by observation of the economy. First, vertical integration is neither inevitable nor ubiquitous. Second, where firms do vertically integrate, that arrangement can offer real efficiencies and benefits to

consumers. Third, firms can and regularly do vertically integrate without excluding or foreclosing unaffiliated firms.

GR have little basis for presuming that new local carriers *necessarily* will vertically integrate and establish exclusive relationships. Economics teaches that firms will find it more efficient to vertically integrate in *some* circumstances, but certainly not in all. In many circumstances, purchasing inputs from a separate firm is more efficient than vertical integration. This is consistent with even casual observation of the economy. Firms do not vertically integrate at every opportunity. Kraft Foods, General Foods, and other large food processors do not feel they have to own the stores in which their products are sold in order to deal directly with their end customers. It is more efficient for supermarkets owned by others to sell the products of many firms.

As with supermarkets, it may be more efficient and profitable for local carriers to allow customers to buy from the interexchange company of their choice and to supply intermediate services to all interexchange services. At least some market evidence casts doubt on whether local and interexchange carriers will find it most efficient to vertically integrate. CAPs have been building substantial local facilities for several years. Most of the service supplied by CAPs has been an input into IXC service, involving either direct sales to IXCs or dedicated connections to IXC POPs. Yet vertical integration between interexchange carriers and CAPs has been the exception rather than the rule. Interexchange carriers might have chosen to begin or invest in CAPs, yet in most cases they have not.

Even if customers want the option of a one-stop bundle of local and long distance service, that could be offered without vertical integration. A local carrier could contract with a long distance carrier to market a combined service to customers while at the same time offering customers the option of choosing their own long distance carrier. Long distance carriers could compete for this business, and it might well turn out that the local carrier would purchase from more than one long distance carrier.

While firms do not always vertically integrate, it is equally true that vertical integration *sometimes* offers real efficiencies and benefits to consumers, and thus should not be automatically condemned. For example, vertical integration may reduce costs by allowing firms to match production of the input more efficiently with its use in producing for consumers. Or a firm may acquire an upstream or downstream firm

because special expertise acquired in its first business also is useful in this related business.<sup>16</sup>

Firms that are vertically integrated, however, frequently deal with unaffiliated firms rather than limiting themselves exclusively to dealing with affiliates. To give just a few examples, regional feeder airlines owned by one major trunk airline sell tickets to travelers who are connecting with the flights of different long-haul airlines. Many supermarkets have their own bakeries on the premises, but also carry other brands of bread and pastries. In telecommunications, some interexchange carriers both sell service to end users and act as carriers' carriers selling capacity to other interexchange carriers, who in turn to sell end users.

#### **IV. New Local Carriers Are Unlikely To Try Anticompetitive Foreclosure**

GR apparently see foreclosure as the obvious and inevitable consequence of vertical integration and the "multi-bottleneck" control they attribute to new local carriers. As we have seen, however, this is not enough. It is possible for vertical integration to result in anticompetitive exclusion in particular circumstances, but anticompetitive foreclosure is not the natural and inevitable consequence when firms vertically integrate, and vertical integration does not necessarily harm rather than benefit consumers. What arguments do GR offer to support their claim that exclusion and foreclosure will be the consequence in this case?

The answer is that GR offer very little support for their claim that integration of local and interexchange carriers, if and where it occurs, will lead to anticompetitive exclusion and foreclosure. GR refer to the Bell System's incentive to use its bottleneck control anticompetitively in the early days of long distance competition, and suggest the "multi-bottleneck" generates the same incentive; in fact GR maintain the "multi-

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<sup>16</sup> Another possible example is provided by the case described in the previous paragraph. If customers clearly preferred the option of a single bundle of local and long distance service, either for convenience or because efficiencies allowed it to be offered at a lower price than separate services, competition might eliminate the option of separate purchases. That would be a manifestation of competition favoring the efficiency of the vertical contract relationship, rather than of exclusion.

bottleneck dilemma exacerbates this problem."<sup>17</sup> Such an argument by analogy clearly is inadequate.

The analogy with the pre-divestiture Bell Operating Companies quickly breaks down when one examines the actual market position of new and entering local carriers. First, regulation played an important role in giving BOCs an incentive to discriminate against competing long distance carriers. New local carriers today are not (and should not be) subject to regulation that would give them these same incentives.

Second, and more importantly, new local carriers face a fundamentally different market environment. With very few exceptions, pre-divestiture BOCs were the only carriers that could supply access to their customers, and legal barriers precluded the possibility of entry. They clearly had true bottleneck control and the ability (absent regulatory restraint) to foreclose entrants that dared to compete with AT&T Long Lines. In contrast, a new local carrier that supplies loops and access service will, at a minimum, face competition from the established LEC. The LEC's loop facilities will remain in place, ready to serve any customer of a new local carrier who wishes to switch back to LEC service. New local carriers also may face competition from other new carriers and, in any case, presumably legal barriers will not protect them from further entry.

The simple analogy GR propose is invalid in a more competitive market environment. More suppliers and greater possibility of entry increase competition and eliminate bottleneck control. A local carrier for whose service customers have good, competitive alternatives is in no position to harm unaffiliated interexchange carriers and help its integrated interexchange carriers. If the carrier tries to foreclose unaffiliated IXCs, customers can and will switch local carriers rather than accept a second-choice IXC or pay higher IXC prices, thus preventing the affiliated IXC from gaining new customers or being able to raise price.

GR want to argue that the analogy with the BOCs holds because local carriers will retain "multi-bottleneck" control, despite new carriers and local competition. We already have seen the fallacy in this argument. There is no "multi-bottleneck" control

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<sup>17</sup> GR at page 10.

that would survive competition among suppliers of local loop and access services and give new local carriers the ability to foreclose unaffiliated interexchange carriers.

Leaving aside failed analogies and turning to economic analysis, there are sound reasons to be very skeptical of claims that new local carriers would be in any position to exercise vertical foreclosure (even assuming they vertically integrate with interexchange carriers).

First, as suggested above, the fact that customers will have competitive alternatives to new local carriers will constrain any ability they might have to use foreclosure to harm unaffiliated interexchange carriers or information service providers. The issue here is not whether competition constrains all local carriers, including the LECs, but the competitive constraint facing new local carriers. Whether new local carriers have incentives to behave anticompetitively depends on the market position of these carriers, which is virtually certain to differ from that of the established LEC for the foreseeable future. Market forces may constrain some firms in a market, but not all.<sup>18</sup>

Even if local service markets are not completely and generally competitive, new local carriers will be constrained by at least one alternative to which customers could switch: service from the LEC. Furthermore, if entry from new local carriers is too limited to sufficiently reduce the market power of the LEC, its services very well may still be regulated. Constraining the exercise of market power that the LEC retains, however, also would constrain any ability of a new local carrier to exercise market power or to attempt to foreclose. The regulated LEC service would remain an alternative to which customers and interexchange carriers could turn if the new local carrier attempted to set higher prices for an unaffiliated interexchange carrier.

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<sup>18</sup> The notion that the competitive positions of firms in a market may differ, and that competition policy should recognize those differences, is a commonplace in antitrust policy, although the so-called asymmetric regulation of firms has sparked considerable controversy. Small firms in a concentrated market may be allowed to merge when larger firms would not, because it is recognized that the larger and smaller firms would face different market constraints on their behavior. Vertical nonprice restrictions judged under the rule of reason, such as assigning dealers exclusive territories, usually are acceptable for a firm with a small market share, but could be a violation of antitrust law for a firm with a larger market share, again because of differences in the firms' market positions and ability to exercise market power. See Department of Justice, 1992 Horizontal Merger Guidelines, and the discussion of vertical nonprice restraints in ABA Antitrust Section, Antitrust Law Developments (3d ed., 1992), esp. pp. 123-127.

Second, anticompetitive foreclosure in favor of an affiliated interexchange carrier would make it harder for a new local carrier to attract new customers -- a serious problem for a new carrier attempting to increase market share and achieve viability. To foreclose or disadvantage an unaffiliated IXC, the new local carrier must charge it more for access than it would but for integrating and trying to foreclose.<sup>19</sup> (If integration is followed only by lower prices than otherwise would have been charged, competition and consumers are helped, not harmed.) Some of the customers the new carrier would be seeking, however, already would be using the disadvantaged interexchange carrier. To sign up these customers, the local carrier would have to convince them either to switch their interexchange carrier as well as their local carrier, or to switch their local carrier even though the foreclosure strategy increases the costs of continuing to use their preferred interexchange carrier. Surely many would-be customers would not lightly and easily change interexchange carriers in these circumstances. Interexchange carriers have developed strong market presences based on years of customer experience and millions of dollars worth of marketing effort. Customers have established relationships with IXCs ranging from special contracts and working relationships for larger businesses to residential customers' comfort with their long-time carrier. New local carriers will have enough difficulty building their businesses without adding to their problems by having to convince customers to shift IXCs.

The position of AT&T in the market further reduces the likelihood that foreclosure would benefit a new local carrier. AT&T would have little incentive to align itself with a local carrier with a relatively small share of access lines who would attempt a foreclosure strategy.<sup>20</sup> Because of its large share of interexchange traffic, AT&T would have more to lose than gain. If the local carrier could integrate only with an interexchange carrier other than AT&T, however, that virtually guarantees that a majority of its potential customers would be served by AT&T or another unaffiliated

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<sup>19</sup> To simplify exposition, we ignore the equivalent possibility that the local carrier could use non-price discrimination to raise the costs of the unaffiliated IXC.

<sup>20</sup> Presumably AT&T would not be allowed to reintegrate with one or more RBOCs, even if the MFJ restriction on BOCs providing interexchange service were lifted. GR recognize that AT&T could be the odd man out in their scenario of vertical integration and foreclosure, but they do not pursue the implications of this for the success of the strategy.



interexchange carrier. That in turn would increase the probable cost of following a foreclosure strategy while trying to attract customers.

A foreclosure strategy also could cost a local carrier other business. CAPs today typically sell a variety of access transport, special access, and other leased services directly to a number of different IXC's. CAPs and new local carriers likely will continue to sell such services to IXC's, notwithstanding GR's apparent belief to the contrary. A local carrier would risk losing sales of these services if it discriminated against unaffiliated IXC's in switched access.<sup>21</sup>

#### **V. Extending Regulation Of New Local Carriers Promises Costs But Few Benefits**

GR argue that a variety of regulatory restraints should be imposed on new local carriers because these carriers will be part of a "multi-bottleneck" market structure. First, GR claim that the rates and terms local carriers charge for access to their loop services should be regulated "for the foreseeable future," regardless of how competitive is the supply of local loops and service.<sup>22</sup> Second, GR would require all local carriers to make specified local services available at "wholesale" rates, with further regulation of the relationship between the rates charged for wholesale and retail service. The Gillan and Rohrbach paper provides no basis for concluding that the benefits of these policies would exceed their costs. (Indeed GR do not even acknowledge that these regulations would impose any costs.)

GR base their call for both sets of regulations on the "multi-bottleneck" control they claim new local carriers will exercise. GR go so far as to claim that the issue of how much competition local carriers will face as suppliers of local services to consumers is "completely irrelevant to the question of when it would be appropriate to deregulate the rates and terms that all LSCs [Local Service Carriers] charge other competing vendors for access to their customer loops" [emphasis in original].<sup>23</sup>

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<sup>21</sup> The supply of such leased services to IXC's is even more likely to be competitive than the supply of service including local loops. Thus, if anything, it is less likely a new local carrier could benefit by discriminating against unaffiliated IXC's in their supply of such leased services.

<sup>22</sup> See GR, pages 15-20, and especially note 25.

<sup>23</sup> GR, note 25 at page 17.

Similarly, GR's call for requiring and regulating the pricing of wholesale offerings of local carriers is based on the presumed bottleneck control of these carriers and on the claimed incentive this will create for vertical integration and foreclosure of unintegrated interexchange carriers.

As we have seen, the claim that new local carriers will control a "multi-bottleneck" regardless of the state of local exchange competition is contrary to sound economic analysis, and certainly does not establish that new local carriers will possess market power that would justify the costs of the proposed additional regulation. GR provide no reason to view new local carriers as a threat to competition that must be constrained by regulation, rather than as the manifestation of increased competition.

Far from being irrelevant, the competition generated by the entry of new local carriers and the competition these new carriers will face are essential elements in understanding the behavior of these and other firms in local telecommunications markets and for framing sound policy. Market power in the sale of access services to IXC's and information service providers, and anticompetitive exclusion of unaffiliated IXC's are manifestations of a lack of competition. Entry of new local carriers should be seen as helping to solve these problems, not extend them. The best way for policy to attack bottleneck control where it does exist and to prevent anticompetitive foreclosure is with policies, such as number portability, that encourage competition by making it easier for customers to change carriers and that reduce barriers limiting entry or the range of services for which new carriers can provide competition.

There is another problem with GR's proposed regulations. The proposal to require wholesale offerings is, as the authors recognize, a structural remedy. It is designed to protect a particular structure with a place for particular types of firms: stand-alone interexchange carriers and information service providers, especially including smaller firms. Now there may in fact be no need to take action to protect the position of these firms. It nonetheless is important to recognize that this basis for policy-making runs counter to the primary thrust of regulatory and competition policy in recent decades: policy should protect the competitive *process*, but not particular competitors.

GR themselves argue that the current market structure is in large part the result of past policy. As policy and technological changes allow the entry of new suppliers,

there may well be competitive pressure in the market for changes in which firms produce which combinations of which new services and changes in the types and extent of vertical relationships. Firms may have to adapt to these market pressures to survive. Unless they are distorted by regulatory policy, changes in vertical market structure resulting from increased competition are most likely to promote efficiency and benefit consumers. Certainly policy should not do what GR propose: adopt policies to protect the position of particular types of firms with a stake in the current market structure and to lock in a particular vertical market structure that may or may not be efficient.

Finally, it should be clear that GR's regulatory proposals would not constitute a minor intervention, imposing few costs, that might be adopted to protect against a possible, even if unlikely, problem. The GR proposals would subject a wide range of rates and services of new local carriers to increased regulatory review and approval.

Regulatory determinations of non-discriminatory pricing for access services certainly could be difficult and contentious unless new local carriers are limited to selling all such services in uniformly structured, arm's-length transactions. Long term contracts, shared marketing arrangements, or varying degrees or forms of vertical integration all can affect the true cost of the transaction and thus the "nondiscriminatory" price, but in ways difficult to determine through the regulatory process. Yet the complexity introduced by varying vertical arrangements could be avoided only by eliminating them, likely at the cost of lost efficiency.

Regulations requiring new local carriers to make services available at wholesale prices would deeply involve regulators in the pricing, contracting, and design of local carriers' services. Consider some of the difficulties and issues likely to arise. New local carriers are likely to offer a variety of services, with innovation in service capabilities and their adaptation to consumer demands playing an important role in the success of firms and the benefits they offer consumers. Would each such "service" configuration offered to customers also have to be offered at wholesale? Would the offering of each new service, or even the designing of a service for the needs of a particular customer have to wait on regulatory approval of the corresponding wholesale offering and the pricing relationship between the wholesale and retail offerings? Should restrictions and delays be imposed in the name of preventing the carriers' retail offering from having a

marketing "head-start" over the offerings sold at wholesale? Regulation of the wholesale price and the "appropriate" relationship with retail prices also would prove difficult. What are the differences in cost for the local carrier of supplying the wholesale and retail service? How can the retailing cost of a particular service be identified when the same staff markets a wide range of services? Can the regulator monitor and verify the costs needed to make these determinations without specifying accounting practices?

The extension of regulation that GR propose would be costly indeed.

## **VI. Conclusions**

The Gillan and Rohrbach paper begins with a paradox: more local competitors will result in more bottlenecks instead of more competition. On this foundation, the authors build their story that more bottlenecks will lead to vertical integration and foreclosure, and their claim that sweeping new regulations are needed. Economics tells us the paradox is really a contradiction. More suppliers of local loops and services would increase competitive pressures and dissolve bottlenecks, not create new ones. Vertical integration is not inevitable and, to the extent it occurs, is not synonymous with foreclosure and reduced competition. Extensive additional regulation of new local carriers is most unlikely to offer the benefits Gillan and Rohrbach foresee, but it surely would impose substantial costs.